

A New Species of *Phyllophaga* (Coleoptera, Scarabaeidae) from Kentucky.*

By PAUL O. RITCHER, Kentucky Agricultural Experiment Station, Lexington, Kentucky.

The total number of species of *Phyllophaga* taken in Kentucky has been increased to twenty-five as a result of collections made by the writer the past two years. The list is composed of *Phyllophaga anxia* (Lec.), *arkansana* (Schffr.), *bipartita* (Horn), *crenulata* (Froehl.), *delata* (Horn), *ephilida* (Say), *fervida* (Fab.), *fraterna* (Harris), *fusca* (Froehl.), *futilis* (LeConte), *glaberrima* (Blanch.), *hirticula* (Knoch), *hirtiventris* (Horn), *hornii* (Sm.), *ilicis* (Knoch), *implicita* (Horn), *micans* (Knoch), *praetermissa* (Horn), *profunda* (Blanch.), *prunina* (Lec.), *quercus* (Knoch), *rugosa* (Melsh.), *tristis* (Fab.), *vehemens* (Horn) and one species which appears to be undescribed. The new species is named after the state in which it occurs.

Phyllophaga kentuckiana, n. sp.

This species belongs in Horn's Group IX. It resembles *P. fraterna* and *P. forsteri* in many respects but is apparently quite distinct.

Length 16-20 mm. General form oblong, slightly dilated posteriorly. Medium to dark brown in color with slightly darker head and pronotum. Surface moderately shining.

Clypeus rather deeply emarginate; margin reflexed; surface coarsely, closely punctate. Head closely punctate, the punctation slightly coarser than that of clypeus.

Pronotum widest at base; sides subangulate at middle, anteriorly straight and convergent; posteriorly vaguely subsinuate; side margins feebly crenate; surface moderately shining, coarsely, sparsely punctate; punctures rather unevenly distributed. Each pronotal puncture bears a short recumbent yellow hair; hairs in some specimens longer and more prominent at sides.

Elytra: Sutural costae moderately strong, rather wide, sparsely rugose-punctate; discal costae somewhat vague; submarginal costae narrow, obsolete on basal half. Elytral surface shining; finely, irregularly, not closely punctate.

Surface of mesosterum finely, closely punctate; a rather sparse vestiture of yellowish hair.

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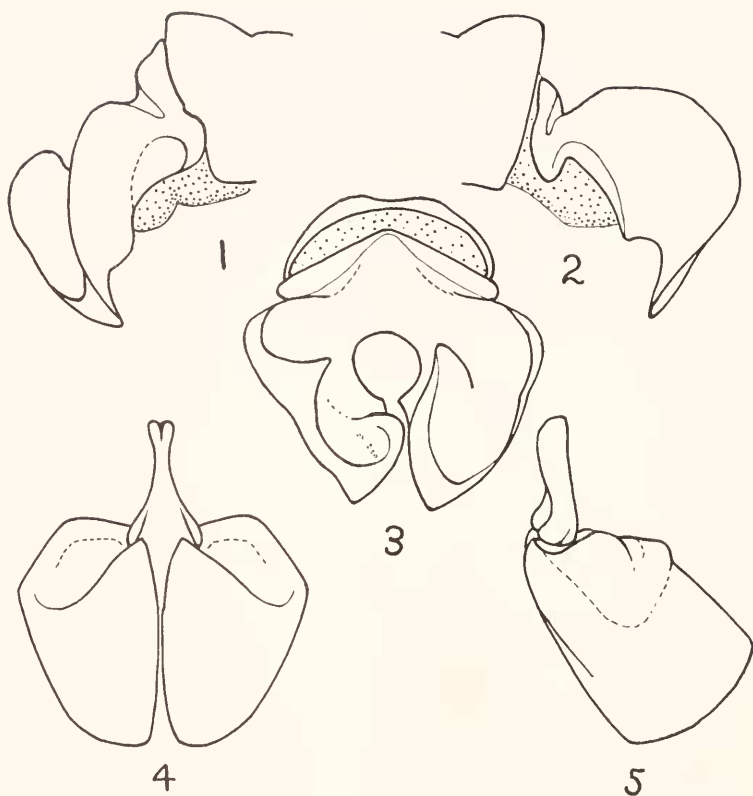


Fig. 1—Upper left—Left male clasper. Fig. 2—Upper right—Right male clasper. Fig. 3—Center—Hind view of the male claspers. Fig. 4—Lower left—Ventral view of female genitalia. Fig. 5—Lower right—Side view of female genitalia.

Abdomen with surface finely, rather sparsely punctate, with short, fine, yellowish hairs. Pygidium rather broad, convex. Surface rather finely and sparsely punctate.

Tooth of claw median; long, nearly right angled in both sexes.

♂ : Antenna 10-segmented; club slightly longer than stem. Upper spur of hind tibia lanceolate elliptical, slightly decurved, obtuse. Lower spur fixed, two-thirds length of upper, acute. Abdomen with longitudinal flattened or depressed area; penultimate segment with an extensive, finely roughened slightly

elevated, arcuate ridge more pronounced to sides; terminal segment with a median, slightly roughened depression. Genitalia well developed, superficially resembles those of *P. rugosa*; quite distinct from those of *P. fraterna* and *P. forsteri*. May be distinguished from *P. fraterna* in that posterior angle of right male clasper is acute and curved inward with tendency to form a ridge on inner face of right clasper. No deep notch in right clasper as in *P. forsteri*.

♀: Antenna 10-segmented; antennal club slightly shorter than funiculus. Upper spur of hind tibia as in male; lower, three-fourths length of upper, broad, obtuse. Pubic process intermediate between that of *P. fraterna* and *P. forsteri*; larger and thicker than pubic process of *P. forsteri*, with notch at distal end.

Holotype.—Male; Lexington, KENTUCKY, May 26, 1936, feeding on red oak.

Allotype.—Female; Lexington, Kentucky, May 11, 1936, feeding on bur oak.

Paratypes.—8 males and 10 females. Two males and four females, Lexington, Kentucky, May 21, 1936. Two males and four females, Cynthiana, Kentucky, June 2, 1920. Three males and two females, Winchester, Kentucky, May 24, 1905. One male, near Mammoth Cave, July 23, 1894.

Holotype and allotype deposited in National Museum. Paratypes in writer's collection and collection of Kentucky Agricultural Experiment Station.

Food plants.—Taken on bur, red and pin oak, walnut, and elderberry.

Some Field Equipment.

By H. ELLIOTT McCLURE, AMES, IOWA.

Several years ago I had a bee in my bonnet to go to the tropics and collect insects. For months I planned and studied what I thought I would need for such an expedition. Either I did not know where to look or the literature on specific equipment for field work is scattered and not usually catalogued. I had considerable difficulty finding helpful hints and even finding men who could tell me what to and what not to take. The tropical trip faded, but I continued to build up